

CLAIMS

1. A *H. pylori* protein or derivative or fragment or mutant or variant thereof capable of inhibiting the activation of NF- κ B.
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2. A *H. pylori* protein as claimed in claim 1 wherein the protein is a thioredoxin or derivative or fragment or mutant or variant thereof.
3. A *H. pylori* protein as claimed in claim 1 wherein the protein has the following amino acid sequence:
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- | | | | |
|------------|------------|------------|------------|
| MSHYIELTEE | NFESTIKKGV | ALVDFWAPWC | GPCKMLSPVI |
| DELAHEYEGK | AKICKVNTDE | QEELSAKFGI | RSIPTLLFTK |
| DGEVVHQLVG | VQTKVALKEQ | LNKLLG | |
- 15
4. A thioredoxin or derivative or fragment or mutant or variant thereof containing the redox active peptide sequence CGPC.
5. Prokaryotic or eukaryotic thioredoxins having potent immune-suppressive effects.
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6. Polypeptides containing the redox active peptide sequence CGPC.
7. A *H. pylori* protein having the following amino acid sequence:
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- | | | | |
|------------|------------|------------|------------|
| MSHYIELTEE | NFESTIKKGV | ALVDFWAPWC | GPCKMLSPVI |
| DELAHEYEGK | AKICKVNTDE | QEELSAKFGI | RSIPTLLFTK |
| DGEVVHQLVG | VQTKVALKEQ | LNKLLG | |
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8. A derivative or fragment or mutant or variant of the protein of claim 7.

9. Use of a *H. pylori* thioredoxin protein or derivative or fragment or variant thereof as claimed in claim 1 in the prevention and/or treatment of inflammation.
- 5 10. Use of a *H. pylori* thioredoxin protein or derivative or fragment or variant thereof as claimed in claim 9 in the prevention and/or treatment of inflammatory bowel disease.
- 10 11. Use of a *H. pylori* thioredoxin protein or derivative or fragment or variant thereof as claimed in claim 9 in the prevention and/or treatment of rheumatoid/autoimmune arthritis.
- 15 12. Use of a *H. pylori* thioredoxin protein or derivative or fragment or variant thereof as claimed in claim 9 in the prevention and/or treatment of any chronic disease wherein NF- κ B is transcriptionally activated.
- 20 13. Use as claimed in claim 11 for the prevention and/or treatment of any one or more of autoimmune arthritis or other autoimmune diseases, asthma, septic shock, lung fibrosis, glomerulonephritis, atherosclerosis or autoimmune encephalomyelitis.
14. Use of a *H. pylori* thioredoxin protein or derivative or fragment or mutant or variant thereof as claimed in any preceding claim in soft tissue injury.
- 25 15. A *H. pylori* thioredoxin protein or derivative or fragment or mutant or variant thereof as claimed in claim 1 for use in the preparation of a medicament for the treatment and/or prophylaxis of any chronic disease wherein NF- κ B is transcriptionally activated.

16. A protein as claimed in claim 1 for use in the preparation of a medicament for the treatment and/or prophylaxis of any chronic disease wherein NF- κ B is transcriptionally activated.